AUTHOR INDEX TO *JOM*, VOLUME 58

JANUARY–DECEMBER 2006

A

ABBOTT, D. "The Root Cause of Black Pad Failure of Solder Joints with Electroless Ni/Immersion Gold Plating," K. Zeng, R. Stierman, D. Abbott, and M. Murtuza, June, pp. 75–79.

AGNEW, S.R. "Mg Sheet Metal Forming: Lessons Learned from Deep Drawing Li and Y Solid-Solution Alloys," S.R. Agnew, J.W. Senn, and J.A. Horton, May, pp. 62–69.

AKHTAR, A. "The Oxidation of Single-Crystal Nickel-Based Superalloys," A. Akhtar, S. Hegde, and R.C. Reed, January, pp. 37–42.

ALLISON, J.E. "Integrated Computational Materials Engineering: A New Paradigm for the Global Materials Profession," J. Allison, D. Backman, and L. Christodoulou, November, pp. 25–27.

ALLISON, J.E. "Virtual Aluminum Castings: An Industrial Application of ICME," J.E. Allison, M. Li, C. Wolverton, and X.-M. Su, November, pp. 28–35, *www.tms.org/pubs/journals/jom/0611/allison-0611.html*.

ANDERSON, C.G. "The Design-of-Experiment Optimization and Development of Cobaltite Ore Mineral Processing," C.G. Anderson, October, pp. 43–46.

ANDERSON, I. "Neutron Sources in North America: Present and Future," T.M. Holden, A.D. Krawitz, and I. Anderson, March, pp. 64–67.

APELIAN, D. "Re-Engineering Engineering Education for the Challenges of the 21st Century," G. Tryggvason and D. Apelian, October, pp. 14–17.

APPLEFORD, M. "The Characterization and Development of Bioactive Hydroxyapatite Coatings," J.L. Ong, M. Appleford, S. Oh, Y. Yang, W.-H. Chen, J.D. Bumgardner, and W.O. Haggard, July, pp. 67–69.

APPLEFORD, M. "Enhancing Osseointegration Using Surface-Modified Titanium Implants," Y. Yang, N. Oh, Y. Liu, W. Chen, S. Oh, M. Appleford, S. Kim, K. Kim, S. Park, J. Bumgardner, W. Haggard, and J. Ong, July, pp. 71–76.

ARKHIPOV, G.V. "The Mathematical Modeling of Aluminum Reduction Cells," G.V. Arkhipov, February, pp. 54–56.

ATKINSON, H.V. "Flow Visualization for Semi-Solid Processing," H.V. Atkinson and P.J. Ward, June, pp. 21–23.

ATWOOD, R.C. "Microporosity Formation during the Solidification of Aluminum-Copper Alloys" (*JOM-e*), P.D. Lee, J. Wang, and R.C. Atwood, December, *www.tms.org/pubs/journals/JOM/0612/Lee/Lee-0612.html*.

AUSTIN, P.C. "The Multivariable Model-Based Control of the Non-Alumina Electrolyte Variables in Aluminum Smelting Cells," F. Stevens McFadden, B. Welch, and P.C. Austin, February, pp. 42–47.

AYALA, E.J. "The Sulfuric Acid Leaching of Bayer Electrofilter Fines: A Practical Kinetical Approach," J.P. Sancho Martínez, E.J. Ayala, M.P. García Coque, P.B. Fernández, and A.D. Costales, August, pp. 58–62.

AZWELL, D.E. "Increasing the Capacity of High-Efficiency Diffusion Fiber Beds in Smelter Gas Plants," S. Ziebold and D.E. Azwell, October, pp. 59–62.

B

BACKMAN, D.G. "ICME at GE: Accelerating the Insertion of New Materials and Processes," D.G. Backman, D.Y. Wei, D.D. Whitis, M.B. Buczek, P.M. Finnigan, and D. Gao, November, pp. 36–41.

BACKMAN, D.G. "Integrated Computational Materials Engineering: A New Paradigm for the Global Materials Profession," J. Allison, D. Backman, and L. Christodoulou, November, pp. 25–27.

BENSON, D.J. "The Deformation Physics of Nanocrystalline Metals: Experiments, Analysis, and Computations," M.A. Meyers, A. Mishra, and D.J. Benson, April, pp. 41–48.

BILLINGE, S.J.L. "Structure Determination and Phase Analysis by the Use of Neutron Diffraction," S.J.L. Billinge, March, pp. 47–51; *www.tms.org/pubs/journals/JOM/0603/Billinge-0603.html*.

BINCZEWSKI, G. "Letter to the Editor," G. Binczewski, June, pp. 4–5.

BODDE, S. "Structural Biological Composites: An Overview," M.A. Meyers, A.Y.M. Lin, Y. Seki, P.-Y. Chen, B.K. Kad, and S. Bodde, July, pp. 35–41.

BRADY, M.P. "The Formation of Protective Nitride Surfaces for PEM Fuel Cell Metallic Bipolar Plates," M.P. Brady, B. Yang, H. Wang, J.A. Turner, K.L. More, M. Wilson, and F. Garzon, August, pp. 50–57.

BRAUN, R. "Recent Progress in the Coating Protection of Gamma Titanium-Aluminides," C. Leyens, P.Eh. Hovsepian, R. Braun, and M. Fröhlich, January, pp. 17–21, *www.tms.org/pubs/journals/jom/0601/levens-0601.html*.

BRESLIN, M.C. "Co-Continuous Composite Materials for Friction and Braking Applications," G.S. Daehn and M.C. Breslin, November, pp. 87–91.

BROOKS, G. "The Carbothermic Route to Magnesium," G. Brooks, S. Trang, P. Witt, M.N.H. Khan, and M. Nagle, May, pp. 51–55.

BRYHAN, A. "Letter to the Editor," A. Bryhan, June, p. 4.

BUCZEK, M.B. "ICME at GE: Accelerating the Insertion of New Materials and Processes," D.G. Backman, D.Y. Wei, D.D. Whitis, M.B. Buczek, P.M. Finnigan, and D. Gao, November, pp. 36–41.

BUMGARDNER, J.D. "The Characterization and Development of Bioactive Hydroxyapatite Coatings," J.L. Ong, M. Appleford, S. Oh, Y. Yang, W.-H. Chen, J.D. Bumgardner, and W.O. Haggard, July, pp. 67–69.

BUMGARDNER, J.D. "Enhancing Osseointegration Using Surface-Modified Titanium Implants," Y. Yang, N. Oh, Y. Liu, W. Chen, S. Oh, M. Appleford, S. Kim, K. Kim, S. Park, J. Bumgardner, W. Haggard, and J. Ong, July, pp. 71–76.

BYKO, M. "2006 Engineering Salaries: Finding the Facts on Paper and On-Line," M. Byko, December, pp. 14–15.

BYKO, M. "From the Open Pit to the Open Market: Minerals Find Added Value as Collectibles," M. Byko, October, pp. 11–13.

BYKO, M. "The History Channel Looks at the "Modern Marvels" of "Heavy Metals," M. Byko, September, pp. 12–15, *www.tms.org/pubs/journals/jom/0609/byko-0609.html*.

BYKO, M. "Talking with the Members of the Globalization of Materials R&D Study," M. Byko, March, pp. 14–16, 18.

BYKO, M. ""When Things Get Small" Finds the Fun in Nanoscience," M. Byko, August, p. 72.

C

CAMM, D.M. "Flash-Assist RTP for Ultra-Shallow Junctions," D.M. Camm, J.C. Gelpey, T. Thrum, G.C. Stuart, and S. McCoy, June, pp. 32–34.

CAO, F. "Ruthenium-Containing Bond Coats for Thermal Barrier Coating Systems," B. Tryon, F. Cao, K.S. Murphy, C.G. Levi, and T.M. Pollock, January, pp. 53–59.

CARLBERG, T. "Solidification Studies of Automotive Heat Exchanger Materials," T. Carlberg, M. Jaradeh, and H. Kamgou Kamga, November, pp. 56–61.

CHADA, S. "Lead-Free Implementation: Reliability, Alloy Development, and New Technology," S. Chada, June, p. 56.

CHAKKA, V.M. "The Pulse-Thermal Processing of NdFeB-Based Nanocomposite Magnets," Z.Q. Jin, V.M. Chakka, Z.L. Wang, J.P. Liu, P. Kadolkar, and R.D. Ott, June, pp. 46–49.

CHANDRA, D. "Metal Hydrides for Vehicular Applications: The State of the Art," D. Chandra, J.J. Reilly, and R. Chellappa, February, pp. 26–32.

CHANG, Y.A. "An Investigation of Phase Transformation Behavior in Sputter-Deposited PtMn Thin Films," C.-X. Ji, P.F. Ladwig, R.D. Ott, Y. Yang, J.J. Yang, Y.A. Chang, E.S. Linville, J. Gao, and B.B. Pant, June, pp. 50–54.

CHAWLA, K.K. "Metal-Matrix Composites in Ground Transportation," N. Chawla and K.K. Chawla, November, pp. 67–70.

CHAWLA, N. "Metal-Matrix Composites in Ground Transportation," N. Chawla and K.K. Chawla, November, pp. 67–70.

CHAWLA, N. "Novel Rare-Earth-Containing Lead-Free Solders with Enhanced Ductility," M.A. Dudek, R.S. Sidhu, and N. Chawla, June, pp. 57–62.

CHELLAPPA, R. "Metal Hydrides for Vehicular Applications: The State of the Art," D. Chandra, J.J. Reilly, and R. Chellappa, February, pp. 26–32.

CHEN, L.-Q. "Linking Length Scales via Materials Informatics," Z.-K. Liu, L.-Q. Chen, and K. Rajan, November, pp. 42–50.

CHEN, M. "Sustainable Recycling of Automotive Products in China: Technology and Regulation," M. Chen, August, pp. 23–26.

CHEN, M. "The 2005 International Workshop on Sustainable Manufacturing," M. Chen, February, pp. 39–40.

CHEN, P.-Y. "Structural Biological Composites: An Overview," M.A. Meyers, A.Y.M. Lin, Y. Seki, P.-Y. Chen, B.K. Kad, and S. Bodde, July, pp. 35–41.

CHEN, T.T. "The X-Ray Tomography of a Siliceous Silver Ore," T.T. Chen, A. Sasov, J.E. Dutrizac, P. Kondos, and G. Poirier, March, pp. 41–44.

CHEN, W. "Enhancing Osseointegration Using Surface-Modified Titanium Implants," Y. Yang, N. Oh, Y. Liu, W. Chen, S. Oh, M. Appleford, S. Kim, K. Kim, S. Park, J. Bumgardner, W. Haggard, and J. Ong, July, pp. 71–76.

CHEN, W.-H. "The Characterization and Development of Bioactive Hydroxyapatite Coatings," J.L. Ong, M. Appleford, S. Oh, Y. Yang, W.-H. Chen, J.D. Bumgardner, and W.O. Haggard, July, pp. 67–69.

CHO, K.C. "The Modeling of Electric-Current-Assisted Sintering to Produce Bulk Nanocrystalline Tungsten," B. McWilliams, A. Zavaliangos, K.C. Cho, and R.J. Dowding, April, pp. 67–71.

CHRISTODOULOU, L. "Integrated Computational Materials Engineering: A New Paradigm for the Global Materials Profession," J. Allison, D. Backman, and L. Christodoulou, November, pp. 25–27.

CLARK, L.P. "Titanium Investment Casting Defects: A Metallographic Overview," J.D. Cotton, L.P. Clark, and H.R. Phelps, June, pp. 13–16.

CLEARY, P.W. "The Design Modification and Optimization of an Ingot Casting Wheel Using SPH"

(*JOM-e*), M. Prakash, P.W. Cleary, J. Grandfield, P. Rohan, and V. Nguyen, December, *www.tms.org/pubs/journals/JOM/0612/Prakash/Prakash-0612.html*.

COLE, A. "High-Density Plasma-Arc Heating Studies of FePt Thin Films," A. Cole, G.B. Thompson, J.W. Harrell, J. Weston, and R. Ott, June, pp. 39–42.

COPLAND, E.H. "Predicting Oxide Stability in High-Temperature Water Vapor," E.J. Opila, N.S. Jacobson, D.L. Myers, and E.H. Copland, January, pp. 22–28.

COSTALES, A.D. "The Sulfuric Acid Leaching of Bayer Electrofilter Fines: A Practical Kinetical Approach," J.P. Sancho Martínez, E.J. Ayala, M.P. García Coque, P.B. Fernández, and A.D. Costales, August, pp. 58–62.

COTTON, J.D. "Titanium Investment Casting Defects: A Metallographic Overview," J.D. Cotton, L.P. Clark, and H.R. Phelps, June, pp. 13–16.

COYLE, T.W. "Vacuum Plasma Spraying: A New Concept for Manufacturing Ti-6Al-4V Structures," H.R. Salimijazi, T.W. Coyle, and J. Mostaghimi, September, pp. 50–56.

CROSS, C.E. "Letter to the Editor," C.E. Cross, June, p. 4.

CUESTA, R. "Numerically Modeling Oxide Entrainment in the Filling of Castings: The Effect of the Webber Number," R. Cuesta, A. Delgado, A. Maroto, and D. Mozo, November, pp. 62–65.

CZERWINSKI, F. "The Basics of Modern Semi-Solid Metal Processing," F. Czerwinski, June, pp. 17–20; *www.tms.org/pubs/journals/jom/0606/czerwinski-0606.html*.

D

DAEHN, G.S. "Co-Continuous Composite Materials for Friction and Braking Applications," G.S. Daehn and M.C. Breslin, November, pp. 87–91.

DAHOTRE, N.B. "A Multi-Textured Calcium Phosphate Coating for Hard Tissue via Laser Surface Engineering," A. Kurella and N.B. Dahotre, July, pp. 64–66.

DAHOTRE, N.B. "Surface Design and Effects in Biological Environment," S. Seal and N.B. Dahotre, July, p. 51.

DALVI, A.D. "*JOM* World Nonferrous Smelter Survey, Part III: Nickel: Laterite," A.E.M. Warner, C.M. Díaz, A.D. Dalvi, P.J. Mackey, and A.V. Tarasov, April, pp. 11–20.

DAS, S. "Improving Aluminum Can Recycling Rates: A Six Sigma Study in Kentucky," S. Das and M. Hughes, August, pp. 27–31, *www.tms.org/pubs/journals/jom/0608/das-0608.html*.

DAVARI, M. "A Correlation-Based Model for Predicting Gas Extraction Performance in a Copper Converting Plant," C.B. Solnordal, P.J. Witt, A. Manzoori, H. Namavari, E. Niknejad, and M. Davari, October, pp. 51–55.

DECKER, R.F. "The Evolution of Wrought Age-Hardenable Superalloys," R.F. Decker, September, pp. 32–36.

DEGEN, C. "The Use of Friction-Stir Technology to Modify the Surfaces of AM60B Magnesium Die Castings," M. Santella, A. Frederick, C. Degen, and T.-Y. Pan, May, pp. 56–61.

DeGRAEF, M. "A Modern 3-D View of an Old "Pearlite" Colony," M. DeGraef, M.V. Kral, and M. Hillert, December, pp. 25–28.

DELGADO, A. "Numerically Modeling Oxide Entrainment in the Filling of Castings: The Effect of the Webber Number," R. Cuesta, A. Delgado, A. Maroto, and D. Mozo, November, pp. 62–65.

DEPPISCH, C. "The Material Optimization and Reliability Characterization of an Indium-Solder Thermal Interface Material for CPU Packaging," C. Deppisch, T. Fitzgerald, A. Raman, F. Hua, C. Zhang, P. Liu, and M. Miller, June, pp. 67–74.

DESAI, V. "Changes in Electrochemical Impedance with Microstructural Development in TBCs," B. Jayaraj, S. Vishweswariah, V.H. Desai, and Y.H. Sohn, January, pp. 60–63.

DESAI, V. "Materials for High-Temperature Protection," V. Desai, January, pp. 15–16.

DEY, S.R. "Nondestructive Approaches for 3-D Materials Characterization," E.M. Lauridsen, S.R. Dey, R.W. Fonda, and D. Juul Jensen, December, pp. 40–44.

DÍAZ, C.M. "*JOM* World Nonferrous Smelter Survey, Part III: Nickel: Laterite," A.E.M. Warner, C.M. Díaz, A.D. Dalvi, P.J. Mackey, and A.V. Tarasov, April, pp. 11–20.

DINWIDDIE, R.B. "Numerical Simulation of High-Density Plasma-Arc Processing of FePt Nanoparticle Films," A.S. Sabau and R.B. Dinwiddie, June, pp. 35–38.

DIONNE, S. "The Characterization of Continuous Hot-Dip Galvanized and Galvannealed Steels," S. Dionne, March, pp. 32–40.

DIPPENAAR, R. "In-Situ Observations of Phase Transformations in Titanium," D. Phelan, M. Reid, N. Stanford, and R. Dippenaar, September, pp. 67–69.

DOWDING, R.J. "The Modeling of Electric-Current-Assisted Sintering to Produce Bulk Nanocrystalline Tungsten," B. McWilliams, A. Zavaliangos, K.C. Cho, and R.J. Dowding, April, pp. 67–71.

DOWDING, R.J. "Nanoengineering Opens a New Era for Tungsten As Well," Q. Wei, K.T. Ramesh, B.E. Schuster, L.J. Keeskes, and R.J. Dowding, September, pp. 40–44.

DU, B. "PEM Fuel Cells: Status and Challenges for Commercial Stationary Power Applications," B. Du, Q. Guo, R. Pollard, D. Rodriguez, C. Smith, and J. Elter, August, pp. 45–59.

DUBE, R.K. "The Extraction of Lead from Its Ores by the Iron-Reduction Process: A Historical Perspective," R.K. Dube, October, pp. 18-23.

DUDEK, M.A. "Novel Rare-Earth-Containing Lead-Free Solders with Enhanced Ductility," M.A. Dudek, R.S. Sidhu, and N. Chawla, June, pp. 57–62.

DUTRIZAC, J.E. "The X-Ray Tomography of a Siliceous Silver Ore," T.T. Chen, A. Sasov, J.E. Dutrizac, P. Kondos, and G. Poirier, March, pp. 41–44.

E

ELTER, J. "PEM Fuel Cells: Status and Challenges for Commercial Stationary Power Applications," B. Du, Q. Guo, R. Pollard, D. Rodriguez, C. Smith, and J. Elter, August, pp. 45–59.

ELWAZRI, A.M. "Materials Characterization Using High-Resolution Scanning-Electron Microscopy and X-Ray Microanalysis," R. Gauvin, K. Robertson, P. Horny, A.M. Elwazri, and S. Yue, March, pp. 20–26.

ESTRIN, Y. "Producing Bulk Ultrafine-Grained Materials by Severe Plastic Deformation," R.Z. Valiev, Y. Estrin, Z. Horita, T.G. Langdon, M.J. Zehetbauer, and Y.T. Zhu, April, pp. 33–39.

F

FELDER, A. "Lead Alloys for Permanent Anodes in the Nonferrous Metals Industry," A. Felder and R.D. Prengaman, October, pp. 28–31.

FERNÁNDEZ, P.B. "The Sulfuric Acid Leaching of Bayer Electrofilter Fines: A Practical Kinetical Approach," J.P. Sancho Martínez, E.J. Ayala, M.P. García Coque, P.B. Fernández, and A.D. Costales, August, pp. 58–62.

FEUERBACH, A. "Crucible Damascus Steel: A Fascination for Almost 2,000 Years," A. Feuerbach, May, pp. 48–50.

FIKSEL, J. "A Framework for Sustainable Materials Management," J. Fiksel, August, pp. 15–22.

FINNIGAN, P.M. "ICME at GE: Accelerating the Insertion of New Materials and Processes," D.G. Backman, D.Y. Wei, D.D. Whitis, M.B. Buczek, P.M. Finnigan, and D. Gao, November, pp. 36–41.

FITZGERALD, T. "The Material Optimization and Reliability Characterization of an Indium-Solder Thermal Interface Material for CPU Packaging," C. Deppisch, T. Fitzgerald, A. Raman, F. Hua, C. Zhang, P. Liu, and M. Miller, June, pp. 67–74.

FONDA, R.W. "Nondestructive Approaches for 3-D Materials Characterization," E.M. Lauridsen, S.R. Dey, R.W. Fonda, and D. Juul Jensen, December, pp. 40–44.

FREDERICK, A. "The Use of Friction-Stir Technology to Modify the Surfaces of AM60B Magnesium Die Castings," M. Santella, A. Frederick, C. Degen, and T.-Y. Pan, May, pp. 56–61.

FRIEDMAN, L.B. "The Commercialization of Nanomaterials: Today and Tomorrow," T.M. Osman, D.E. Rardon, L.B. Friedman, and L.F. Vega, April, pp. 21–24; *www.tms.org/pubs/journals/JOM/0604/Osman-0604.html*.

FRÖLICH, M. "Recent Progress in the Coating Protection of Gamma Titanium-Aluminides," C. Leyens, P.Eh. Hovsepian, R. Braun, and M. Fröhlich, January, pp. 17–21, *www.tms.org/pubs/journals/jom/0601/leyens-0601.html*.

FULTZ, B. "Materials Science Applications of Inelastic Neutron Scattering," B. Fultz, March, pp. 58–63.

FULTZ, B. "Neutron Scattering Applied to Materials Problems," J.R. Morris, X.-L. Wang, and B.T. Fultz, March, p. 46.

G

GAO, D. "ICME at GE: Accelerating the Insertion of New Materials and Processes," D.G. Backman, D.Y. Wei, D.D. Whitis, M.B. Buczek, P.M. Finnigan, and D. Gao, November, pp. 36–41.

GAO, J. "An Investigation of Phase Transformation Behavior in Sputter-Deposited PtMn Thin Films," C.-X. Ji, P.F. Ladwig, R.D. Ott, Y. Yang, J.J. Yang, Y.A. Chang, E.S. Linville, J. Gao, and B.B. Pant, June, pp. 50–54.

GARCÍA COQUE, M.P. "The Sulfuric Acid Leaching of Bayer Electrofilter Fines: A Practical Kinetical Approach," J.P. Sancho Martínez, E.J. Ayala, M.P. García Coque, P.B. Fernández, and A.D. Costales, August, pp. 58–62.

GARCÍA, R. "About the Pre-Hispanic Au-Pt "Sintering" Technique for Making Alloys," M. Noguez, R. García, G. Salas, T. Robert, and J. Ramírez, May, pp. 38-43.

GARZON, F. "The Formation of Protective Nitride Surfaces for PEM Fuel Cell Metallic Bipolar Plates," M.P. Brady, B. Yang, H. Wang, J.A. Turner, K.L. More, M. Wilson, and F. Garzon, August, pp. 50–57.

GAUVIN, R. "Materials Characterization Using High-Resolution Scanning-Electron Microscopy and X-Ray Microanalysis," R. Gauvin, K. Robertson, P. Horny, A.M. Elwazri, and S. Yue, March, pp. 20–26.

GELPEY, J.C. "Flash-Assist RTP for Ultra-Shallow Junctions," D.M. Camm, J.C. Gelpey, T. Thrum, G.C. Stuart, and S. McCoy, June, pp. 32–34.

GELTMACHER, A.B. "Quantitative Analysis and Feature Recognition in 3-D Microstructural Data Sets," A.C. Lewis, C. Suh, M. Stukowski, A.B. Geltmacher, G. Spanos, and K. Rajan, December, pp. 52–56.

GHOMASHCHI, R. "The Microstructural Characterization of Semi-Solid Slurries," S. Nafisi and R. Ghomashchi, June, pp. 24–30.

GIBBON, D.L. "How Roebling Did It: Building the World's First Wire-Rope Suspension Aqueduct in 1840s Pittsburgh," D.L. Gibbon, May, pp. 20–29; *www.tms.org/pubs/journals/JOM/0605/Gibbon-0605.html*.

GORDON, R. "Silver Cycles: The Stocks and Flows

Project, Part 3," J. Johnson, R. Gordon, and T. Graedel, February, pp. 34–38.
GRAEDEL, T. "Silver Cycles: The Stocks and Flows Project, Part 3," J. Johnson, R. Gordon, and T. Graedel, February, pp. 34–38.
GRANDE, T. "The Stability of Refractory Oxides in Sodium-Rich Environments," C. Schoning and T. Grande, February, pp. 58–61.
GRANDFIELD, J. "The Design Modification and Optimization of an Ingot Casting Wheel Using SPH" (*JOM-e*), M. Prakash, P.W. Cleary, J. Grandfield, P. Rohan, and V. Nguyen, December, *www.tms.org/pubs/journals/JOM/0612/Prakash/Prakash-0612.html*.
GRANT, G. "Low-Cost Composites in Automotive and Heavy Vehicle Manufacture," G. Grant, November, p. 66.
GUO, Q. "PEM Fuel Cells: Status and Challenges for Commercial Stationary Power Applications," B. Du, Q. Guo, R. Pollard, D. Rodriguez, C. Smith, and J. Elter, August, pp. 45-59.
GUPTA, N. "Applications of Fly Ash in Synthesizing Low-Cost MMCs for Automotive and Other Applications," P.K. Rohatgi, D. Weiss, and N. Gupta, November, pp. 71–76.
GUPTA, N. "The Solidification Processing of Metal-Matrix Composites: The Rohatgi Symposium," N. Gupta and K.G. Satyanarayana, November, pp. 92–94.

H

HAGGARD, W. "The Characterization and Development of Bioactive Hydroxyapatite Coatings," J.L. Ong, M. Appleford, S. Oh, Y. Yang, W.-H. Chen, J.D. Bumgardner, and W.O. Haggard, July, pp. 67–69.
HAGGARD, W. "Enhancing Osseointegration Using Surface-Modified Titanium Implants," Y. Yang, N. Oh, Y. Liu, W. Chen, S. Oh, M. Appleford, S. Kim, K. Kim, S. Park, J. Bumgardner, W. Haggard, and J. Ong, July, pp. 71–76.
HARADA, H. "The Oxidation Properties of Fourth Generation Single-Crystal Nickel-Based Superalloys," K. Kawagishi, H. Harada, A. Sato, A. Sato, and T. Kobayashi, January, pp. 43–46.
HARRELL, J.W. "High-Density Plasma-Arc Heating Studies of FePt Thin Films," A. Cole, G.B. Thompson, J.W. Harrell, J. Weston, and R. Ott, June, pp. 39–42.
HARRELL, J.W. "Pulsed-Thermal Processing of Chemically Synthesized FePt Nanoparticles," S. Shi, S. Kang, J. Lawson, Z. Jia, D. Nikles, J.W. Harrell, R. Ott, and P. Kadolkar, June, pp. 43–45.
HEGDE, S. "The Oxidation of Single-Crystal Nickel-Based Superalloys," A. Akhtar, S. Hegde, and R.C. Reed, January, pp. 37–42.
HENCH, L.L. "The Effect of Micro-Gravity and Bioactive Surfaces on the Mineralization of Bone," J. Maroothynaden and L.L. Hench, July, pp. 57–63.
HENCH, L.L. "The Potential Toxicity of Nanomaterials—The Role of Surfaces," A.S. Karakoti, L.L. Hench, and S. Seal, July, pp. 77–82.
HILDEMAN, G.J. "The History and Archaeology of Materials Symposium," G.J. Hildeman, May, p. 19.
HILLERT, M. "A Modern 3-D View of an Old "Pearlite" Colony," M. DeGraef, M.V. Kral, and M. Hillert, December, pp. 25–28.
HOBBS, L.W. "The Use of Functionally Gradient Materials in Medicine," R.J. Narayan, L.W. Hobbs, C. Jin, and A. Rabiei, July, pp. 52–56.
HODGE, A. "Biological Materials Science in the TMS World," A. Hodge and M. Meyers, July, pp. 20–22.
HODGE, F.G. "The History of Solid-Solution-Strengthened Ni Alloys for Aqueous Corrosion Service," F.G. Hodge, September, pp. 28–31.
HOLBERY, J. "Natural-Fiber-Reinforced Polymer Composites in Automotive Applications," J. Holbery and D. Houston, November, pp. 80–86.
HOLDEN, T.H. "Neutron Sources in North America: Present and Future," T.M. Holden, A.D. Krawitz, and I. Anderson, March, pp. 64–67.
HORITA, Z. "Producing Bulk Ultrafine-Grained Materials by Severe Plastic Deformation," R.Z. Valiev, Y. Estrin, Z. Horita, T.G. Langdon, M.J. Zehetbauer, and Y.T. Zhu, April, pp. 33–39.
HORNY, P. "Materials Characterization Using High-Resolution Scanning-Electron Microscopy and X-Ray Microanalysis," R. Gauvin, K. Robertson, P. Horny, A.M. Elwazri, and S. Yue, March, pp. 20–26.
HORTON, J.A. "Mg Sheet Metal Forming: Lessons Learned from Deep Drawing Li and Y Solid-Solution Alloys," S.R. Agnew, J.W. Senn, and J.A. Horton, May, pp. 62–69.
HOSFORD, W.F. "The Anisotropy of Aluminum and Aluminum Alloys," W.F. Hosford, May, pp. 70–74.
HOUSTON, D. "Natural-Fiber-Reinforced Polymer Composites in Automotive Applications," J. Holbery and D. Houston, November, pp. 80–86.
HOVSEPIAN, P.Eh. "Recent Progress in the Coating Protection of Gamma Titanium-Aluminides," C. Leyens, P.Eh. Hovsepian, R. Braun, and M. Fröhlich, January, pp. 17–21, *www.tms.org/pubs/journals/jom/0601/leyens-0601.html*.
HUA, F. "The Material Optimization and Reliability Characterization of an Indium-Solder Thermal Interface Material for CPU Packaging," C. Deppisch, T. Fitzgerald, A. Raman, F. Hua, C. Zhang, P. Liu, and M. Miller, June, pp. 67–74.
HUGHES, M. "Improving Aluminum Can Recycling Rates: A Six Sigma Study in Kentucky," S. Das and M. Hughes, August, pp. 27–31, *www.tms.org/pubs/journals/jom/0608/das-0608.html*.
HUGHES, M. "Understanding Recycling Behavior in Kentucky: Who Recycles and Why," F.W. Morgan and M.V. Hughes, August, pp. 32–35.
HUNT, W.H., Jr. "Materials Informatics: Growing from the Bio World," W.H. Hunt, Jr., July, p. 88.

J

JACOBSON, N.S. "Predicting Oxide Stability in High-Temperature Water Vapor," E.J. Opila, N.S. Jacobson, D.L. Myers, and E.H. Copland, January, pp. 22–28.
JARADEH, M. "Solidification Studies of Automotive Heat Exchanger Materials," T. Carlberg, M. Jaradeh, and H. Kamgou Kamga, November, pp. 56–61.
JAYARAJ, B. "Changes in Electrochemical Impedance with Microstructural Development in TBCs," B. Jayaraj, S. Vishweswariah, V.H. Desai, and Y.H. Sohn, January, pp. 60–63.
JEBBINK, P. "Expanding the Cobalt Recovery Circuit at the Thompson Nickel Refinery," P. Jebbink, R. Stefan, D. Neff, and M. Tomlinson, October, pp. 37–42.
JI, C.-X. "An Investigation of Phase Transformation Behavior in Sputter-Deposited PtMn Thin Films," C.-X. Ji, P.F. Ladwig, R.D. Ott, Y. Yang, J.J. Yang, Y.A. Chang, E.S. Linville, J. Gao, and B.B. Pant, June, pp. 50–54.
JIA, Z. "Pulsed-Thermal Processing of Chemically Synthesized FePt Nanoparticles," S. Shi, S. Kang, J. Lawson, Z. Jia, D. Nikles, J.W. Harrell, R. Ott, and P. Kadolkar, June, pp. 43-45.
JIN, C. "The Use of Functionally Gradient Materials in Medicine," R.J. Narayan, L.W. Hobbs, C. Jin, and A. Rabiei, July, pp. 52-56.
JIN, Z.Q. "The Pulse-Thermal Processing of NdFeB-Based Nanocomposite Magnets," Z.Q. Jin, V.M. Chakka, Z.L. Wang, J.P. Liu, P. Kadolkar, and R.D. Ott, June, pp. 46–49.
JOHNSON, J. "Silver Cycles: The Stocks and Flows Project, Part 3," J. Johnson, R. Gordon, and T. Graedel, February, pp. 34–38.
JUUL JENSEN, D. "Nondestructive Approaches for 3-D Materials Characterization," E.M. Lauridsen, S.R. Dey, R.W. Fonda, and D. Juul Jensen, December, pp. 40–44.

K

KAD, B.K. "Structural Biological Composites: An Overview," M.A. Meyers, A.Y.M. Lin, Y. Seki, P.-Y. Chen, B.K. Kad, and S. Bodde, July, pp. 35–41.
KADOLKAR, P. "Pulsed-Thermal Processing of Chemically Synthesized FePt Nanoparticles," S. Shi, S. Kang, J. Lawson, Z. Jia, D. Nikles, J.W. Harrell, R. Ott, and P. Kadolkar, June, pp. 43–45.
KADOLKAR, P. "The Pulse-Thermal Processing of NdFeB-Based Nanocomposite Magnets," Z.Q. Jin, V.M. Chakka, Z.L. Wang, J.P. Liu, P. Kadolkar, and R.D. Ott, June, pp. 46–49.
KAMGOU KAMGA, H. "Solidification Studies of Automotive Heat Exchanger Materials," T. Carlberg, M. Jaradeh, and H. Kamgou Kamga, November, pp. 56–61.
KANG, S. "Pulsed-Thermal Processing of Chemically Synthesized FePt Nanoparticles," S. Shi, S. Kang, J. Lawson, Z. Jia, D. Nikles, J.W. Harrell, R. Ott, and P. Kadolkar, June, pp. 43–45.
KAPUSTA, J.P.T. "Cobalt Production and Markets: A Brief Overview," J.P.T. Kapusta, October, pp. 33–36.
KARAKOTI, A.S. "The Potential Toxicity of Nanomaterials—The Role of Surfaces," A.S. Karakoti, L.L. Hench, and S. Seal, July, pp. 77–82.
KARATZANI, A. "The Use of Metal Threads and Decorations in Byzantine-Greek Orthodox Ecclesiastical Textiles," A. Karatzani and Th. Rehren, May, pp. 34–37.
KAWAGISHI, K. "The Oxidation Properties of Fourth Generation Single-Crystal Nickel-Based Superalloys," K. Kawagishi, H. Harada, A. Sato, A. Sato, and T. Kobayashi, January, pp. 43–46.
KECSKES, L.J. "Nanoengineering Opens a New Era for Tungsten As Well," Q. Wei, K.T. Ramesh, B.E. Schuster, L.J. Kecskes, and R.J. Dowding, September, pp. 40–44.
KHAN, M.N.H. "The Carbothermic Route to Magnesium," G. Brooks, S. Trang, P. Witt, M.N.H. Khan, and M. Nagle, May, pp. 51–55.
KIM, K. "Enhancing Osseointegration Using Surface-Modified Titanium Implants," Y. Yang, N. Oh, Y. Liu, W. Chen, S. Oh, M. Appleford, S. Kim, K. Kim, S. Park, J. Bumgardner, W. Haggard, and J. Ong, July, pp. 71–76.
KIM, S. "Enhancing Osseointegration Using Surface-Modified Titanium Implants," Y. Yang, N. Oh, Y. Liu, W. Chen, S. Oh, M. Appleford, S. Kim, K. Kim, S. Park, J. Bumgardner, W. Haggard, and J. Ong, July, pp. 71–76.
KOBAYASHI, T. "The Oxidation Properties of Fourth Generation Single-Crystal Nickel-Based Superalloys," K. Kawagishi, H. Harada, A. Sato, A. Sato, and T. Kobayashi, January, pp. 43–46.
KOHN, D.H. "Ultrastructural Changes during Fatigue of Bone," D.H. Kohn, July, pp. 46–50.
KONDOS, P. "The X-Ray Tomography of a Siliceous Silver Ore," T.T. Chen, A. Sasov, J.E. Dutrizac, P. Kondos, and G. Poirier, March, pp. 41–44.
KONGOLI, F. "The Sohn International Symposium on Advanced Processing of Metals and Materials," F. Kongoli, November, p. 95.
KRAL, M.V. "A Modern 3-D View of an Old "Pearlite" Colony," M. DeGraef, M.V. Kral, and M. Hillert, December, pp. 25-28.
KRAWITZ, A.D. "Neutron Sources in North America: Present and Future," T.M. Holden, A.D. Krawitz, and I. Anderson, March, pp. 64-67.
KURELLA, A. "A Multi-Textured Calcium

Phosphate Coating for Hard Tissue via Laser Surface Engineering," A. Kurella and N.B. Dahotre, July, pp. 64-66.

L

LADWIG, P.F. "An Investigation of Phase Transformation Behavior in Sputter-Deposited PtMn Thin Films," C.-X. Ji, P.F. Ladwig, R.D. Ott, Y. Yang, J.J. Yang, Y.A. Chang, E.S. Linville, J. Gao, and B.B. Pant, June, pp. 50–54.

LANGDON, T.G. "Producing Bulk Ultrafine-Grained Materials by Severe Plastic Deformation," R.Z. Valiev, Y. Estrin, Z. Horita, T.G. Langdon, M.J. Zehetbauer, and Y.T. Zhu, April, pp. 33–39.

LAURIDSEN, E.M. "Nondestructive Approaches for 3-D Materials Characterization," E.M. Lauridsen, S.R. Dey, R.W. Fonda, and D. Juul Jensen, December, pp. 40–44.

LAVERNIA, E.J. "Multi-Scale Al 5083 for Military Vehicles with Improved Performance," A.P. Newbery, S.R. Nutt, and E.J. Lavernia, April, pp. 56–61.

LAWSON, J. "Pulsed-Thermal Processing of Chemically Synthesized FePt Nanoparticles," S. Shi, S. Kang, J. Lawson, Z. Jia, D. Nikles, J.W. Harrell, R. Ott, and P. Kadolkar, June, pp. 43–45.

LEE, P.D. "Microporosity Formation during the Solidification of Aluminum-Copper Alloys" (*JOM-e*), P.D. Lee, J. Wang, and R.C. Atwood, December, *www.tms.org/pubs/journals/JOM/0612/Lee/Lee-0612.html*.

LENZ, J. "S-Furnace Roof Modifications at Xstrata Copper, Timmins, Canada," A. MacRae and J. Lenz, October, pp. 56–58.

LEVI, C.G. "Ruthenium-Containing Bond Coats for Thermal Barrier Coating Systems," B. Tryon, F. Cao, K.S. Murphy, C.G. Levi, and T.M. Pollock, January, pp. 53–59.

LEWIS, A.C. "Quantitative Analysis and Feature Recognition in 3-D Microstructural Data Sets," A.C. Lewis, C. Suh, M. Stukowski, A.B. Geltmacher, G. Spanos, and K. Rajan, December, pp. 52–56.

LEWIS, D. "Solidification Defects Revisited and Semi-Solid Processing," D. Lewis, June, p. 12.

LEYENS, C. "Recent Progress in the Coating Protection of Gamma Titanium-Aluminides," C. Leyens, P.Eh. Hovsepian, R. Braun, and M. Fröhlich, January, pp. 17–21, *www.tms.org/pubs/journals/jom/0601/leyens-0601.html*.

LI, J. "The Focused-Ion-Beam Microscopy—More than a Precision Ion Milling Machine," J. Li, March, pp. 27–31.

LI, J. "The Industrial Application of Advanced Electron Microscopy," J. Li, March, p. 19.

LI, M. "Virtual Aluminum Castings: An Industrial Application of ICME," J.E. Allison, M. Li, C. Wolverton, and X.-M. Su, November, pp. 28–35, *www.tms.org/pubs/journals/jom/0611/allison-0611.html*.

LIN, A.Y.M. "Structural Biological Composites: An Overview," M.A. Meyers, A.Y.M. Lin, Y. Seki, P.-Y. Chen, B.K. Kad, and S. Bodde, July, pp. 35–41.

LINVILLE, E.S. "An Investigation of Phase Transformation Behavior in Sputter-Deposited PtMn Thin Films," C.-X. Ji, P.F. Ladwig, R.D. Ott, Y. Yang, J.J. Yang, Y.A. Chang, E.S. Linville, J. Gao, and B.B. Pant, June, pp. 50–54.

LIU, J.P. "The Pulse-Thermal Processing of NdFeB-Based Nanocomposite Magnets," Z.Q. Jin, V.M. Chakka, Z.L. Wang, J.P. Liu, P. Kadolkar, and R.D. Ott, June, pp. 46–49.

LIU, P. "The Material Optimization and Reliability Characterization of an Indium-Solder Thermal Interface Material for CPU Packaging," C. Deppisch, T. Fitzgerald, A. Raman, F. Hua, C. Zhang, P. Liu, and M. Miller, June, pp. 67–74.

LIU, W.K. "The 3-D Computational Modeling of Shear-Dominated Ductile Failure in Steel," F.J. Vernerey, C. McVeigh, W.K. Liu, B. Moran, D. Tewari, D.M. Parks, and G.B. Olson, December, pp. 45–51.

LIU, Y. "Enhancing Osseointegration Using Surface-Modified Titanium Implants," Y. Yang, N. Oh, Y. Liu, W. Chen, S. Oh, M. Appleford, S. Kim, K. Kim, S. Park, J. Bumgardner, W. Haggard, and J. Ong, July, pp. 71–76.

LIU, Z.-K. "Linking Length Scales via Materials Informatics," Z.-K. Liu, L.-Q. Chen, and K. Rajan, November, pp. 42–50.

LOWE, T.C. "Metals and Alloys Nanostructured by Severe Plastic Deformation: Commercialization Pathways," T.C. Lowe, April, pp. 28–32.

LUDWIG, A. "Modeling Macrosegregation with a Multiphase Approach: Examples and Discussion" (*JOM-e*), M. Wu and A. Ludwig, December, *www.tms.org/pubs/journals/JOM/0612/Wu/Wu-0612.html*.

M

MA, E. "Eight Routes to Improve the Tensile Ductility of Bulk Nanostructured Metals and Alloys," E. Ma, April, pp. 49–53.

MACKEY, P.J. "*JOM* World Nonferrous Smelter Survey, Part III: Nickel: Laterite," A.E.M. Warner, C.M. Díaz, A.D. Dalvi, P.J. Mackey, and A.V. Tarasov, April, pp. 11–20.

MACRAE, A. "S-Furnace Roof Modifications at Xstrata Copper, Timmins, Canada," A. MacRae and J. Lenz, October, pp. 56–58.

MANN, V.C. "The Use of a Dynamic Aluminum Cell Model," T.V. Piskazhova and V.C. Mann, February, pp. 48–52.

MANZOORI, A. "A Correlation-Based Model for Predicting Gas Extraction Performance in a Copper Converting Plant," C.B. Solnordal, P.J. Witt, A. Manzoori, H. Namavari, E. Niknejad, and M. Davari, October, pp. 51–55.

MAROOTHYNADEN, J. "The Effect of Micro-Gravity and Bioactive Surfaces on the Mineralization of Bone," J. Maroothynaden and L.L. Hench, July, pp. 57–63.

MAROTO, A. "Numerically Modeling Oxide Entrainment in the Filling of Castings: The Effect of the Webber Number," R. Cuesta, A. Delgado, A. Maroto, and D. Mozo, November, pp. 62–65.

McCOY, S. "Flash-Assist RTP for Ultra-Shallow Junctions," D.M. Camm, J.C. Gelpey, T. Thrum, G.C. Stuart, and S. McCoy, June, pp. 32–34.

McVEIGH, C. "The 3-D Computational Modeling of Shear-Dominated Ductile Failure in Steel," F.J. Vernerey, C. McVeigh, W.K. Liu, B. Moran, D. Tewari, D.M. Parks, and G.B. Olson, December, pp. 45-51.

McWILLIAMS, B. "The Modeling of Electric-Current-Assisted Sintering to Produce Bulk Nanocrystalline Tungsten," B. McWilliams, A. Zavaliangos, K.C. Cho, and R.J. Dowding, April, pp. 67–71.

MEYERS, M. "Biological Materials Science in the TMS World," A. Hodge and M. Meyers, July, pp. 20–22.

MEYERS, M.A. "The Deformation Physics of Nanocrystalline Metals: Experiments, Analysis, and Computations," M.A. Meyers, A. Mishra, and D.J. Benson, April, pp. 41–48.

MEYERS, M.A. "Structural Biological Composites: An Overview," M.A. Meyers, A.Y.M. Lin, Y. Seki, P.-Y. Chen, B.K. Kad, and S. Bodde, July, pp. 35–41.

MILLER, M. "The Material Optimization and Reliability Characterization of an Indium-Solder Thermal Interface Material for CPU Packaging," C. Deppisch, T. Fitzgerald, A. Raman, F. Hua, C. Zhang, P. Liu, and M. Miller, June, pp. 67–74.

MISHRA, A. "The Deformation Physics of Nanocrystalline Metals: Experiments, Analysis, and Computations," M.A. Meyers, A. Mishra, and D.J. Benson, April, pp. 41–48.

MISHRA, B. "TMS Strategic Planning: A Journey and a Destination," B. Mishra, July, pp. 14–16.

MISHRA, R.S. "The Mechanics of Biological Materials," R. Mishra, July, p. 34.

MORAN, B. "The 3-D Computational Modeling of Shear-Dominated Ductile Failure in Steel," F.J. Vernerey, C. McVeigh, W.K. Liu, B. Moran, D. Tewari, D.M. Parks, and G.B. Olson, December, pp. 45–51.

MORE, K.L. "The Formation of Protective Nitride Surfaces for PEM Fuel Cell Metallic Bipolar Plates," M.P. Brady, B. Yang, H. Wang, J.A. Turner, K.L. More, M. Wilson, and F. Garzon, August, pp. 50–57.

MORGAN, F.W. "Understanding Recycling Behavior in Kentucky: Who Recycles and Why," F.W. Morgan and M.V. Hughes, August, pp. 32–35.

MORRIS, J.R. "Neutron Scattering Applied to Materials Problems," J.R. Morris, X.-L. Wang, and B.T. Fultz, March, p. 46.

MOSTAGHIMI, J. "Vacuum Plasma Spraying: A New Concept for Manufacturing Ti-6Al-4V Structures," H.R. Salimijazi, T. Coyle, and J. Mostaghimi, September, pp. 50–56.

MOZO, D. "Numerically Modeling Oxide Entrainment in the Filling of Castings: The Effect of the Webber Number," R. Cuesta, A. Delgado, A. Maroto, and D. Mozo, November, pp. 62–65.

MURPHY, K.S. "Ruthenium-Containing Bond Coats for Thermal Barrier Coating Systems," B. Tryon, F. Cao, K.S. Murphy, C.G. Levi, and T.M. Pollock, January, pp. 53–59.

MURR, L.E. "Biological Issues in Materials Science and Engineering: Interdisciplinarity and the Bio-Materials Pardigm," L.E. Murr, July, pp. 23–33; *www.tms.org/pubs/journals/jom/0607/murr-0607.html*.

MURTUZA, M. "The Root Cause of Black Pad Failure of Solder Joints with Electroless Ni/Immersion Gold Plating," K. Zeng, R. Stierman, D. Abbott, and M. Murtuza, June, pp. 75–79.

MYERS, D.L. "Predicting Oxide Stability in High-Temperature Water Vapor," E.J. Opila, N.S. Jacobson, D.L. Myers, and E.H. Copland, January, pp. 22–28.

N

NAFISI, S. "The Microstructural Characterization of Semi-Solid Slurries," S. Nafisi and R. Ghomashchi, June, pp. 24–30.

NAGLE, M. "The Carbothermic Route to Magnesium," G. Brooks, S. Trang, P. Witt, M.N.H. Khan, and M. Nagle, May, pp. 51–55.

NAMAVARI, H. "A Correlation-Based Model for Predicting Gas Extraction Performance in a Copper Converting Plant," C.B. Solnordal, P.J. Witt, A. Manzoori, H. Namavari, E. Niknejad, and M. Davari, October, pp. 51–55.

NARAYAN, R.J. "The Use of Functionally Gradient Materials in Medicine," R.J. Narayan, L.W. Hobbs, C. Jin, and A. Rabiei, July, pp. 52–56.

NEFF, D. "Expanding the Cobalt Recovery Circuit at the Thompson Nickel Refinery," P. Jebbink, R. Stefan, D. Neff, and M. Tomlinson, October, pp. 37–42.

NEWBERY, A.P. "Multi-Scale Al 5083 for Military Vehicles with Improved Performance," A.P. Newbery, S.R. Nutt, and E.J. Lavernia, April, pp. 56–61.

NGUYEN, V. "The Design Modification and Optimization of an Ingot Casting Wheel Using SPH" (JOM-e: *Research Summary*), M. Prakash, P.W. Cleary, J. Grandfield, P. Rohan, and V. Nguyen, December, *www.tms.org/pubs/journals/JOM/0612/Prakash/Prakash-0612.html*.

NIKLES, D. "Pulsed-Thermal Processing of Chemically Synthesized FePt Nanoparticles," S. Shi, S. Kang, J. Lawson, Z. Jia, D. Nikles, J.W. Harrell, R. Ott, and P. Kadolkar, June, pp. 43–45.

NIKNEJAD, E. "A Correlation-Based Model for Predicting Gas Extraction Performance in a Copper Converting Plant," C.B. Solnordal, P.J. Witt, A.

Manzoori, H. Namavari, E. Niknejad, and M. Davari, October, pp. 51–55.

NOGUEZ, M. "About the Pre-Hispanic Au-Pt "Sintering" Technique for Making Alloys," M. Noguez, R. García, G. Salas, T. Robert, and J. Ramírez, May, pp. 38–43.

NOGUEZ, M. "The Sacred in Mesoamerican Materials," G. Salas, J. Ramírez, and M. Noguez, May, pp. 44–47.

NORGATE, T. "The Potential Applications for Titanium Metal Powder and Their Life Cycle Impacts," T.E. Norgate and G. Wellwood, September, pp. 58–63.

NUTT, S.R. "Multi-Scale Al 5083 for Military Vehicles with Improved Performance," A.P. Newbery, S.R. Nutt, and E.J. Lavernia, April, pp. 56–61.

O

OH, N. "Enhancing Osseointegration Using Surface-Modified Titanium Implants," Y. Yang, N. Oh, Y. Liu, W. Chen, S. Oh, M. Appleford, S. Kim, K. Kim, S. Park, J. Bumgardner, W. Haggard, and J. Ong, July, pp. 71–76.

OH, S. "The Characterization and Development of Bioactive Hydroxyapatite Coatings," J.L. Ong, M. Appleford, S. Oh, Y. Yang, W.-H. Chen, J.D. Bumgardner, and W.O. Haggard, July, pp. 67–69.

OH, S. "Enhancing Osseointegration Using Surface-Modified Titanium Implants," Y. Yang, N. Oh, Y. Liu, W. Chen, S. Oh, M. Appleford, S. Kim, K. Kim, S. Park, J. Bumgardner, W. Haggard, and J. Ong, July, pp. 71–76.

OLSON, G.B. "The 3-D Computational Modeling of Shear-Dominated Ductile Failure in Steel," F.J. Vernerey, C. McVeigh, W.K. Liu, B. Moran, D. Tewari, D.M. Parks, and G.B. Olson, December, pp. 45–51.

ONG, J.L. "The Characterization and Development of Bioactive Hydroxyapatite Coatings," J.L. Ong, M. Appleford, S. Oh, Y. Yang, W.-H. Chen, J.D. Bumgardner, and W.O. Haggard, July, pp. 67–69.

ONG, J. "Enhancing Osseointegration Using Surface-Modified Titanium Implants," Y. Yang, N. Oh, Y. Liu, W. Chen, S. Oh, M. Appleford, S. Kim, K. Kim, S. Park, J. Bumgardner, W. Haggard, and J. Ong, July, pp. 71–76.

OPILA, E.J. "Predicting Oxide Stability in High-Temperature Water Vapor," E.J. Opila, N.S. Jacobson, D.L. Myers, and E.H. Copland, January, pp. 22–28.

OSMAN, T. "The Commercialization of Nanomaterials: Today and Tomorrow," T.M. Osman, D.E. Rardon, L.B. Friedman, and L.F. Vega, April, pp. 21–24; *www.tms.org/pubs/journals/JOM/0604/Osman-0604.html*.

OTT, R. "High-Density Plasma-Arc Heating Studies of FePt Thin Films," A. Cole, G.B. Thompson, J.W. Harrell, J. Weston, and R. Ott, June, pp. 39-42.

OTT, R. "An Investigation of Phase Transformation Behavior in Sputter-Deposited PtMn Thin Films," C.-X. Ji, P.F. Ladwig, R.D. Ott, Y. Yang, J.J. Yang, Y.A. Chang, E.S. Linville, J. Gao, and B.B. Pant, June, pp. 50–54.

OTT, R. "Pulsed-Thermal Processing of Chemically Synthesized FePt Nanoparticles," S. Shi, S. Kang, J. Lawson, Z. Jia, D. Nikles, J.W. Harrell, R. Ott, and P. Kadolkar, June, pp. 43–45.

OTT, R. "Pulse-Thermal Processing for Electronic Applications," R. Ott, June, p. 31.

OTT, R. "The Pulse-Thermal Processing of NdFeB-Based Nanocomposite Magnets," Z.Q. Jin, V.M. Chakka, Z.L. Wang, J.P. Liu, P. Kadolkar, and R.D. Ott, June, pp. 46–49.

P

PAN, T.-Y. "The Use of Friction-Stir Technology to Modify the Surfaces of AM60B Magnesium Die Castings," M. Santella, A. Frederick, C. Degen, and T.-Y. Pan, May, pp. 56–61.

PANT, B.B. "An Investigation of Phase Transformation Behavior in Sputter-Deposited PtMn Thin Films," C.-X. Ji, P.F. Ladwig, R.D. Ott, Y. Yang, J.J. Yang, Y.A. Chang, E.S. Linville, J. Gao, and B.B. Pant, June, pp. 50–54.

PARK, S. "Enhancing Osseointegration Using Surface-Modified Titanium Implants," Y. Yang, N. Oh, Y. Liu, W. Chen, S. Oh, M. Appleford, S. Kim, K. Kim, S. Park, J. Bumgardner, W. Haggard, and J. Ong, July, pp. 71–76.

PARKS, D.M. "The 3-D Computational Modeling of Shear-Dominated Ductile Failure in Steel," F.J. Vernerey, C. McVeigh, W.K. Liu, B. Moran, D. Tewari, D.M. Parks, and G.B. Olson, December, pp. 45–51.

PATEL, S.J. "A Century of Discoveries, Inventors, and New Nickel Alloys," S.J. Patel, September, pp. 18–20.

PHELAN, D. "In-situ Observations of Phase Transformations in Titanium," D. Phelan, M. Reid, N. Stanford, and R. Dippenaar, September, pp. 67–69.

PHELPS, H.R. "Titanium Investment Casting Defects: A Metallographic Overview," J.D. Cotton, L.P. Clark, and H.R. Phelps, June, pp. 13-16.

PINT, B.A. "Deformation and Phase Transformations during the Cyclic Oxidation of Ni-Al and Ni-Pt-Al," B.A. Pint, S.A. Speakman, C.J. Rawn, and Y. Zhang, January, pp. 47–52.

PISKAZHOVA, T.V. "The Use of a Dynamic Aluminum Cell Model," T.V. Piskazhova and V.C. Mann, February, pp. 48–52.

PIZZO, P.P. "Letter to the Editor," P.P. Pizzo, June, p. 4.

POIRIER, G. "The X-Ray Tomography of a Siliceous Silver Ore," T.T. Chen, A. Sasov, J.E. Dutrizac, P. Kondos, and G. Poirier, March, pp. 41–44.

POLLARD, R. "PEM Fuel Cells: Status and Challenges for Commercial Stationary Power Applications," B. Du, Q. Guo, R. Pollard, D. Rodriguez, C. Smith, and J. Elter, August, pp. 45–59.

POLLOCK, T.M. "Ruthenium-Containing Bond Coats for Thermal Barrier Coating Systems," B. Tryon, F. Cao, K.S. Murphy, C.G. Levi, and T.M. Pollock, January, pp. 53–59.

PRAKASH, M. "The Design Modification and Optimization of an Ingot Casting Wheel Using SPH" (*JOM-e*), M. Prakash, P.W. Cleary, J. Grandfield, P. Rohan, and V. Nguyen, December, *www.tms.org/pubs/journals/JOM/0612/Prakash/Prakash-0612.html*.

PRENGAMAN, R.D. "Lead Alloys for Permanent Anodes in the Nonferrous Metals Industry," A. Felder and R.D. Prengaman, October, pp. 28–31.

R

RABIEI, A. "The Use of Functionally Gradient Materials in Medicine," R.J. Narayan, L.W. Hobbs, C. Jin, and A. Rabiei, July, pp. 52–56.

RADACK, D.V. "The Uniform Trade Secrets Act," D.V. Radack, January, p. 72.

RAJAN, K. "Linking Length Scales via Materials Informatics," Z.-K. Liu, L.-Q. Chen, and K. Rajan, November, pp. 42–50.

RAJAN, K. "Quantitative Analysis and Feature Recognition in 3-D Microstructural Data Sets," A.C. Lewis, C. Suh, M. Stukowski, A.B. Geltmacher, G. Spanos, and K. Rajan, December, pp. 52–56.

RAMAN, A. "The Material Optimization and Reliability Characterization of an Indium-Solder Thermal Interface Material for CPU Packaging," C. Deppisch, T. Fitzgerald, A. Raman, F. Hua, C. Zhang, P. Liu, and M. Miller, June, pp. 67–74.

RAMESH, K.T. "Nanoengineering Opens a New Era for Tungsten As Well," Q. Wei, K.T. Ramesh, B.E. Schuster, L.J. Kecskes, and R.J. Dowding, September, pp. 40–44.

RAMÍREZ, J. "About the Pre-Hispanic Au-Pt "Sintering" Technique for Making Alloys," M. Noguez, R. García, G. Salas, T. Robert, and J. Ramírez, May, pp. 38–43.

RAMÍREZ, J. "The Sacred in Mesoamerican Materials," G. Salas, J. Ramírez, and M. Noguez, May, pp. 44–47.

RARDON, D.E. "The Commercialization of Nanomaterials: Today and Tomorrow," T.M. Osman, D.E. Rardon, L.B. Friedman, and L.F. Vega, April, pp. 21–24; *www.tms.org/pubs/journals/JOM/0604/Osman-0604.html*.

RAWN, C.J. "Deformation and Phase Transformations during the Cyclic Oxidation of Ni-Al and Ni-Pt-Al," B.A. Pint, S.A. Speakman, C.J. Rawn, and Y. Zhang, January, pp. 47–52.

REDDY, R.G. "The Processing of Nanopowders by Thermal Plasma Technology," L. Tong and R.G. Reddy, April, pp. 62-66.

REED, R.C. "The Oxidation of Single-Crystal Nickel-Based Superalloys," A. Akhtar, S. Hegde, and R.C. Reed, January, pp. 37–42.

REED, R.C. "Superalloys and Coatings for High-Temperature Applications," R.C. Reed, January, p. 36.

REHREN, Th. "The Use of Metal Threads and Decorations in Byzantine-Greek Orthodox Ecclesiastical Textiles," A. Karatzani and Th. Rehren, May, pp. 34–37.

REID, M. "In-situ Observations of Phase Transformations in Titanium," D. Phelan, M. Reid, N. Stanford, and R. Dippenaar, September, pp. 67–69.

REILLY, J.J. "Metal Hydrides for Vehicular Applications: The State of the Art," D. Chandra, J.J. Reilly, and R. Chellappa, February, pp. 26–32.

ROBERT, T. "About the Pre-Hispanic Au-Pt "Sintering" Technique for Making Alloys," M. Noguez, R. García, G. Salas, T. Robert, and J. Ramírez, May, pp. 38–43.

ROBERTSON, K. "Materials Characterization Using High-Resolution Scanning-Electron Microscopy and X-Ray Microanalysis," R. Gauvin, K. Robertson, P. Horny, A.M. Elwazri, and S. Yue, March, pp. 20–26.

ROBINSON, J.J. "The Editor's Blog from MS&T'06: Some Highlights Drawn from One Man's 2.5% Solution," J.J. Robinson, December, pp. 11–13.

ROBINSON, J.J. IN THE FINAL ANALYSIS, J.J. Robinson, January, February, April, May, July, August, November, December, p. 4; March, June, September, October, p. 2.

ROBINSON, J.J. "Introducing the Nominees for the Greatest Materials Moments in History," J.J. Robinson, November, pp. 51–55.

RODRIGUEZ, D. "PEM Fuel Cells: Status and Challenges for Commercial Stationary Power Applications," B. Du, Q. Guo, R. Pollard, D. Rodriguez, C. Smith, and J. Elter, August, pp. 45–59.

ROHAN, P. "The Design Modification and Optimization of an Ingot Casting Wheel Using SPH" (*JOM-e*), M. Prakash, P.W. Cleary, J. Grandfield, P. Rohan, and V. Nguyen, December, *www.tms.org/pubs/journals/JOM/0612/Prakash/Prakash-0612.html*.

ROHATGI, P.K. "Applications of Fly Ash in Synthesizing Low-Cost MMCs for Automotive and Other Applications," P.K. Rohatgi, D. Weiss, and N. Gupta, November, pp. 71–76.

RONCONE, K. "A Puzzling Collection: Mechanical Brainteasers Challenge and Entertain," K. Roncone, October, p. 72.

RONCONE, K. "Following in Their Footsteps: Tales from Materials Science and Engineering Families," K. Roncone, February, pp. 22–25; *www.tms.org/pubs/journals/JOM/0602/Roncone-0602.html*.

RONCONE, K. "New Technical Committee Sponsors Webcast on Emerging Issues in Intellectual

Property," K. Roncone, March, p. 88.
RONCONE, K. "Preserving the *USS Arizona*: Retired Engineer Applies Skills to Public Service," K. Roncone, September, p. 80.
RONCONE, K. "Reflections on a Life of Materials Science: Robert Cahn and *The Art of Belonging*," K. Roncone, June, p. 88.
RONCONE, K. "Talking with the MS&T'06 Program Coordinating Committee," K. Roncone, July, pp. 17–19.
RONCONE, K. "Composites Have Merit: New Boy Scout Badge Focuses on Materials," K. Roncone, November, p. 104.

S

SABAU, A. "Numerical Simulation of High-Density Plasma-Arc Processing of FePt Nanoparticle Films," A.S. Sabau and R.B. Dinwiddie, June, pp. 35–38.
SALAS, G. "About the Pre-Hispanic Au-Pt "Sintering" Technique for Making Alloys," M. Noguez, R. García, G. Salas, T. Robert, and J. Ramírez, May, pp. 38–43.
SALAS, G. "The Sacred in Mesoamerican Materials," G. Salas, J. Ramírez, and M. Noguez, May, pp. 44–47.
SALIMIJAZI, H. "Vacuum Plasma Spraying: A New Concept for Manufacturing Ti-6Al-4V Structures," H.R. Salimijazi, T. Coyle, and J. Mostaghimi, September, pp. 50–56.
SANCHO MARTÍNEZ, J.P. "The Sulfuric Acid Leaching of Bayer Electrofilter Fines: A Practical Kinetical Approach," J.P. Sancho Martínez, E.J. Ayala, M.P. García Coque, P.B. Fernández, and A.D. Costales, August, pp. 58–62.
SANTELLA, M. "The Use of Friction-Stir Technology to Modify the Surfaces of AM60B Magnesium Die Castings," M. Santella, A. Frederick, C. Degen, and T.-Y. Pan, May, pp. 56–61.
SASOV, A. "The X-Ray Tomography of a Siliceous Silver Ore," T.T. Chen, A. Sasov, J.E. Dutrizac, P. Kondos, and G. Poirier, March, pp. 41–44.
SATO, A. "The Oxidation Properties of Fourth Generation Single-Crystal Nickel-Based Superalloys," K. Kawagishi, H. Harada, A. Sato, A. Sato, and T. Kobayashi, January, pp. 43–46.
SATYANARAYANA, K.G. "The Solidification Processing of Metal-Matrix Composites: The Rohatgi Symposium," N. Gupta and K.G. Satyanarayana, November, pp. 92–94.
SCHØNING, C. "The Stability of Refractory Oxides in Sodium-Rich Environments," C. Schøning and T. Grande, February, pp. 58–61.
SCHUSTER, B.E. "Nanoengineering Opens a New Era for Tungsten As Well," Q. Wei, K.T. Ramesh, B.E. Schuster, L.J. Kecskes, and R.J. Dowding, September, pp. 40–44.
SEAL, S. "Surface Design and Effects in Biological Environment," S. Seal and N.B. Dahotre, July, p. 51.
SEAL, S. "The Potential Toxicity of Nanomaterials—The Role of Surfaces," A.S. Karakoti, L.L. Hench, and S. Seal, July, pp. 77–82.
SEIDMAN, D.N. "The Use of 3-D Atom-Probe Tomography to Study Nickel-Based Superalloys," D.N. Seidman, C.K. Sudbrack, and K.E. Yoon, December, pp. 34–39.
SEKI, Y. "Structural Biological Composites: An Overview," M.A. Meyers, A.Y.M. Lin, Y. Seki, P.-Y. Chen, B.K. Kad, and S. Bodde, July, pp. 35–41.
SENN, J.W. "Mg Sheet Metal Forming: Lessons Learned from Deep Drawing Li and Y Solid-Solution Alloys," S.R. Agnew, J.W. Senn, and J.A. Horton, May, pp. 62–69.
SENGUPTA, J. "The Visualization of Defect Formation during Casting Processes" (*JOM-e*), B.G. Thomas and J. Sengupta, December, pp. 16–18; *www.tms.org/pubs/journals/JOM/0612/Thomas/Thomas-0612.html*.
SENGUPTA, J. "Visualizing Hook and Oscillation Mark Formation in Continuously Cast Ultra-Low Carbon Steel Slabs," (*JOM-e*), J. Sengupta and B.G. Thomas, December, *www.tms.org/pubs/journals/JOM/0612/Sengupta/Sengupta-0612.html*.
SHA, W. "The Evolution of Microstructure during the Processing of Gamma Ti-Al Alloys," W. Sha, September, pp. 64–66.
SHI, S. "Pulsed-Thermal Processing of Chemically Synthesized FePt Nanoparticles," S. Shi, S. Kang, J. Lawson, Z. Jia, D. Nikles, J.W. Harrell, R. Ott, and P. Kadolkar, June, pp. 43–45.
SHOEMAKER, L.E. "A Century of Monel Metal: 1906–2006," L.E. Shoemaker and G.D. Smith, September, pp. 22–26.
SIDHU, R.S. "Novel Rare-Earth-Containing Lead-Free Solders with Enhanced Ductility," M.A. Dudek, R.S. Sidhu, and N. Chawla, June, pp. 57–62.
SILVERMAN, A.B. "Court Rules on Patentability Standards for Composition Ranges," A.B. Silverman, February, p. 72.
SILVERMAN, A.B. "Patent Infringement—The Doctrine of Equivalents Revisited," A.B. Silverman, December, p. 72.
SILVERMAN, A.B. "The Role of Protective Orders in Intellectual Property Litigation," A.B. Silverman, May, p. 80.
SILVERMAN, A.B. "Watch What You Say—Appellate Court Clarifies Standards to be Applied in Interpreting Technical Patent Claim Language," A.B. Silverman, April, p. 80.
SINGH GAUR, R.P. "Modern Hydrometallurgical Production Methods for Tungsten," R.P. Singh Gaur, September, pp. 45–49.
SMIALEK, J.L. "Moisture-Induced Delayed Spallation and Interfacial Hydrogen Embrittlement of Alumina Scales," J.L. Smialek, January, pp. 29–35.
SMITH, C. "PEM Fuel Cells: Status and Challenges for Commercial Stationary Power Applications," B. Du, Q. Guo, R. Pollard, D. Rodriguez, C. Smith, and J. Elter, August, pp. 45–59.
SMITH, G.D. "A Century of Monel Metal: 1906–2006," L.E. Shoemaker and G.D. Smith, September, pp. 22–26.
SMITH, G.D. "Future Trends in Key Nickel Alloy Markets," G.D. Smith, September, pp. 38–39.
SOHN, Y.H. "Changes in Electrochemical Impedance with Microstructural Development in TBCs," B. Jayaraj, S. Vishweswariah, V.H. Desai, and Y.H. Sohn, January, pp. 60–63.
SOLNORDAL, C.B. "A Correlation-Based Model for Predicting Gas Extraction Performance in a Copper Converting Plant," C.B. Solnordal, P.J. Witt, A. Manzoori, H. Namavari, E. Niknejad, and M. Davari, October, pp. 51–55.
SPANOS, G. "Quantitative Analysis and Feature Recognition in 3-D Microstructural Data Sets," A.C. Lewis, C. Suh, M. Stukowski, A.B. Geltmacher, G. Spanos, and K. Rajan, December, pp. 52–56.
SPEAKMAN, S.A. "Deformation and Phase Transformations during the Cyclic Oxidation of Ni-Al and Ni-Pt-Al," B.A. Pint, S.A. Speakman, C.J. Rawn, and Y. Zhang, January, pp. 47–52.
SPOWART, J. "The 3-D Analysis of Discontinuously Reinforced Aluminum Composite Microstructures," J.E. Spowart, December, pp. 29–33.
STANFORD, N. "In-Situ Observations of Phase Transformations in Titanium," D. Phelan, M. Reid, N. Stanford, and R. Dippenaar, September, pp. 67–69.
STEFAN, R. "Expanding the Cobalt Recovery Circuit at the Thompson Nickel Refinery," P. Jebbink, R. Stefan, D. Neff, and M. Tomlinson, October, pp. 37–42.
STEVENS McFADDEN, F. "The Multivariable Model-Based Control of the Non-Alumina Electrolyte Variables in Aluminum Smelting Cells," F. Stevens McFadden, B. Welch, and P.C. Austin, February, pp. 42–47.
STIERMAN, R. "The Root Cause of Black Pad Failure of Solder Joints with Electroless Ni/Immersion Gold Plating," K. Zeng, R. Stierman, D. Abbott, and M. Murtuza, June, pp. 75–79.
STUART, G.C. "Flash-Assist RTP for Ultra-Shallow Junctions," D.M. Camm, J.C. Gelpey, T. Thrum, G.C. Stuart, and S. McCoy, June, pp. 32–34.
STUKOWSKI, M. "Quantitative Analysis and Feature Recognition in 3-D Microstructural Data Sets," A.C. Lewis, C. Suh, M. Stukowski, A.B. Geltmacher, G. Spanos, and K. Rajan, December, pp. 52–56.
SU, X.-M. "Virtual Aluminum Castings: An Industrial Application of ICME," J.E. Allison, M. Li, C. Wolverton, and X.-M. Su, November, pp. 28–35, *www.tms.org/pubs/journals/jom/0611/allison-0611.html*.
SUDBRACK, C.K. "The Use of 3-D Atom-Probe Tomography to Study Nickel-Based Superalloys," D.N. Seidman, C.K. Sudbrack, and K.E. Yoon, December, pp. 34–39.
SUGRUE, M. "Letter to the Editor," M. Sugrue, June, p. 5.
SUH, C. "Quantitative Analysis and Feature Recognition in 3-D Microstructural Data Sets," A.C. Lewis, C. Suh, M. Stukowski, A.B. Geltmacher, G. Spanos, and K. Rajan, December, pp. 52–56.
SUH, J.O. "A Synchrotron Radiation X-Ray Microdiffraction Study on Orientation Relationships between a Cu_6Sn_5 and Cu Substrate in Solder Joints," J.O. Suh, K.N. Tu, and N. Tamura, June, pp. 63–66.
SULLIVAN, R.A. "Automotive Carbon Fiber: Opportunities and Challenges," R.A. Sullivan, November, pp. 77–79.

T

TAMURA, N. "A Synchrotron Radiation X-Ray Microdiffraction Study on Orientation Relationships between a Cu_6Sn_5 and Cu Substrate in Solder Joints," J.O. Suh, K.N. Tu, and N. Tamura, June, pp. 63–66.
TARASOV, A.V. "*JOM* World Nonferrous Smelter Survey, Part III: Nickel: Laterite," A.E.M. Warner, C.M. Díaz, A.D. Dalvi, P.J. Mackey, and A.V. Tarasov, April, pp. 11–20.
TEWARI, D. "The 3-D Computational Modeling of Shear-Dominated Ductile Failure in Steel," F.J. Vernerey, C. McVeigh, W.K. Liu, B. Moran, D. Tewari, D.M. Parks, and G.B. Olson, December, pp. 45–51.
THOMAS, B.G. "The Visualization of Defect Formation during Casting Processes" (*JOM-e*), B.G. Thomas and J. Sengupta, December, pp. 16-18; *www.tms.org/pubs/journals/JOM/0612/Thomas/Thomas-0612.html*.
THOMAS, B.G. "Transient Fluid-Flow Phenomena in the Continuous-Steel-Slab-Casting Mold and Defect Formation," B.G. Thomas, Q. Yuan, B. Zhao, and S.P. Vanka, December (*JOM-e*), *www.tms.org/pubs/journals/JOM/0612/ThomasII/ThomasII-0612.html*.
THOMAS, B.G. "Visualizing Hook and Oscillation Mark Formation in Continuously Cast Ultra-Low Carbon Steel Slabs," J. Sengupta and B.G. Thomas, December (*JOM-e*) *www.tms.org/pubs/journals/JOM/0612/Sengupta/Sengupta-0612.html*.
THOMPSON, G.B. "High-Density Plasma-Arc Heating Studies of FePt Thin Films," A. Cole, G.B. Thompson, J.W. Harrell, J. Weston, and R. Ott, June, pp. 39–42.
THRUM, T. "Flash-Assist RTP for Ultra-Shallow Junctions," D.M. Camm, J.C. Gelpey, T. Thrum, G.C. Stuart, and S. McCoy, June, pp. 32–34.
TOMLINSON, M. "Expanding the Cobalt Recovery Circuit at the Thompson Nickel Refinery," P. Jebbink, R. Stefan, D. Neff, and M. Tomlinson, October, pp. 37–42.

TONG, L. "The Processing of Nanopowders by Thermal Plasma Technology," L. Tong and R.G. Reddy, April, pp. 62–66.
TRANG, S. "The Carbothermic Route to Magnesium," G. Brooks, S. Trang, P. Witt, M.N.H. Khan, and M. Nagle, May, pp. 51–55.
TRYGGVASON, G. "Re-Engineering Engineering Education for the Challenges of the 21st Century," G. Tryggvason and D. Apelian, October, pp. 14–17.
TRYON, B. "Ruthenium-Containing Bond Coats for Thermal Barrier Coating Systems," B. Tryon, F. Cao, K.S. Murphy, C.G. Levi, and T.M. Pollock, January, pp. 53–59.
TU, K.N. "A Synchrotron Radiation X-Ray Microdiffraction Study on Orientation Relationships between a Cu_6Sn_5 and Cu Substrate in Solder Joints," J.O. Suh, K.N. Tu, and N. Tamura, June, pp. 63–66.
TURNER, J.A. "The Formation of Protective Nitride Surfaces for PEM Fuel Cell Metallic Bipolar Plates," M.P. Brady, B. Yang, H. Wang, J.A. Turner, K.L. More, M. Wilson, and F. Garzon, August, pp. 50–57.

U

UCHIC, M.D. "3-D Microstructural Characterization: Methods, Analysis, and Applications," M.D. Uchic, December, p. 24.

V

VALIEV, R.Z. "Producing Bulk Ultrafine-Grained Materials by Severe Plastic Deformation," R.Z. Valiev, Y. Estrin, Z. Horita, T.G. Langdon, M.J. Zehetbauer, and Y.T. Zhu, April, pp. 33–39.
VANKA, S.P. "Transient Fluid-Flow Phenomena in the Continuous-Steel-Slab Casting Mold and Defect Formation," B.G. Thomas, Q. Yuan, B. Zhao, and S.P. Vanka, December (*JOM-e*) *www.tms.org/pubs/journals/JOM/0612/ThomasII/ThomasII-0612.html*.
VEGA, L.F. "The Commercialization of Nanomaterials: Today and Tomorrow," T.M. Osman, D.E. Rardon, L.B. Friedman, and L.F. Vega, April, pp. 21–24; *www.tms.org/pubs/journals/JOM/0604/Osman-0604.html*.
VERNEREY, F.J. "The 3-D Computational Modeling of Shear-Dominated Ductile Failure in Steel," F.J. Vernerey, C. McVeigh, W.K. Liu, B. Moran, D. Tewari, D.M. Parks, and G.B. Olson, December, pp. 45-51.
VISHWESWARIAH, S. "Changes in Electrochemical Impedance with Microstructural Development in TBCs," B. Jayaraj, S. Vishweswariah, V.H. Desai, and Y.H. Sohn, January, pp. 60-63.
VISSER, D. "Letter to the Editor," D. Visser, June, p. 5.

W

WAN, K.-T. "Incorporating Solid Mechanics into Biomedical and Life Sciences," K.-T. Wan, July, pp. 42–45.
WANG, H. "The Formation of Protective Nitride Surfaces for PEM Fuel Cell Metallic Bipolar Plates," M.P. Brady, B. Yang, H. Wang, J.A. Turner, K.L. More, M. Wilson, and F. Garzon, August, pp. 50–57.
WANG, J. "Microporosity Formation during the Solidification of Aluminum-Copper Alloys" (*JOM-e*), P.D. Lee, J. Wang, and R.C. Atwood, December, *www.tms.org/pubs/journals/JOM/0612/Lee/Lee-0612.html*.
WANG, S. "Cobalt—Its Recovery, Recycling, and Application," S. Wang, October, pp. 47–50, *www.tms.org/pubs/journals/jom/0610/wang-0610.html*.
WANG, X.-L. "Neutron Scattering Applied to Materials Problems," J.R. Morris, X.-L. Wang, and B.T. Fultz, March, p. 46.
WANG, X.-L. "The Application of Neutron Diffraction to Engineering Problems," X.-L. Wang, March, pp. 52–57.
WANG, Z.L. "The Pulse-Thermal Processing of NdFeB-Based Nanocomposite Magnets," Z.Q. Jin, V.M. Chakka, Z.L. Wang, J.P. Liu, P. Kadolkar, and R.D. Ott, June, pp. 46–49.
WARD, P.J. "Flow Visualization for Semi-Solid Processing," H.V. Atkinson and P.J. Ward, June, pp. 21–23.
WARNER, A.E.M. "*JOM* World Nonferrous Smelter Survey, Part III: Nickel: Laterite," A.E.M. Warner, C.M. Díaz, A.D. Dalvi, P.J. Mackey, and A.V. Tarasov, April, pp. 11–20.
WEI, D.Y. "ICME at GE: Accelerating the Insertion of New Materials and Processes," D.G. Backman, D.Y. Wei, D.D. Whitis, M.B. Buczek, P.M. Finnigan, and D. Gao, November, pp. 36–41.
WEI, Q. "Nanoengineering Opens a New Era for Tungsten as Well," Q. Wei, K.T. Ramesh, B.E. Schuster, L.J. Kecskes, and R.J. Dowding, September, pp. 40–44.
WEIL, K.S. "The State-of-the-Art in Sealing Technology for Solid Oxide Fuel Cells," K.S. Weil, August, pp. 37–44.
WEISS, D. "Applications of Fly Ash in Synthesizing Low-Cost MMCs for Automotive and Other Applications," P.K. Rohatgi, D. Weiss, and N. Gupta, November, pp. 71–76.
WELLWOOD, G. "The Potential Applications for Titanium Metal Powder and Their Life Cycle Impacts," T.E. Norgate and G. Wellwood, September, pp. 58–63.
WELCH, B. "The Multivariable Model-Based Control of the Non-Alumina Electrolyte Variables in Aluminum Smelting Cells," F. Stevens McFadden, B. Welch, and P.C. Austin, February, pp. 42–47.
WELTER, J.-M. "Understanding the Copper of the Statue of Liberty," J.-M. Welter, May, pp. 30–33.
WESTON, J. "High-Density Plasma-Arc Heating Studies of FePt Thin Films," A. Cole, G.B. Thompson, J.W. Harrell, J. Weston, and R. Ott, June, pp. 39–42.
WHITIS, D.D. "ICME at GE: Accelerating the Insertion of New Materials and Processes," D.G. Backman, D.Y. Wei, D.D. Whitis, M.B. Buczek, P.M. Finnigan, and D. Gao, November, pp. 36–41.
WILSON, D.N. "Beyond Batteries: Other Trends in the Demand for Lead," D.N. Wilson, October, pp. 24–27.
WILSON, M. "The Formation of Protective Nitride Surfaces for PEM Fuel Cell Metallic Bipolar Plates," M.P. Brady, B. Yang, H. Wang, J.A. Turner, K.L. More, M. Wilson, and F. Garzon, August, pp. 50–57.
WITT, P. "The Carbothermic Route to Magnesium," G. Brooks, S. Trang, P. Witt, M.N.H. Khan, and M. Nagle, May, pp. 51–55.
WITT, P.J. "A Correlation-Based Model for Predicting Gas Extraction Performance in a Copper Converting Plant," C.B. Solnordal, P.J. Witt, A. Manzoori, H. Namavari, E. Niknejad, and M. Davari, October, pp. 51–55.
WOLVERTON, C. "Virtual Aluminum Castings: An Industrial Application of ICME," J.E. Allison, M. Li, C. Wolverton, and X.-M. Su, November, pp. 28–35, *www.tms.org/pubs/journals/jom/0611/allison-0611.html*.
WU, M. "Modeling Macrosegregation with a Multiphase Approach: Examples and Discussion" (*JOM-e*), M. Wu and A. Ludwig, December, *www.tms.org/pubs/journals/JOM/0612/Wu/Wu-0612.html*.

Y

YANG, B. "The Formation of Protective Nitride Surfaces for PEM Fuel Cell Metallic Bipolar Plates," M.P. Brady, B. Yang, H. Wang, J.A. Turner, K.L. More, M. Wilson, and F. Garzon, August, pp. 50–57.
YANG, J.J. "An Investigation of Phase Transformation Behavior in Sputter-Deposited PtMn Thin Films," C.-X. Ji, P.F. Ladwig, R.D. Ott, Y. Yang, J.J. Yang, Y.A. Chang, E.S. Linville, J. Gao, and B.B. Pant, June, pp. 50–54.
YANG, Y. "An Investigation of Phase Transformation Behavior in Sputter-Deposited PtMn Thin Films," C.-X. Ji, P.F. Ladwig, R.D. Ott, Y. Yang, J.J. Yang, Y.A. Chang, E.S. Linville, J. Gao, and B.B. Pant, June, pp. 50–54.
YANG, Y. "Enhancing Osseointegration Using Surface-Modified Titanium Implants," Y. Yang, N. Oh, Y. Liu, W. Chen, S. Oh, M. Appleford, S. Kim, K. Kim, S. Park, J. Bumgardner, W. Haggard, and J. Ong, July, pp. 71–76.
YANG, Y. "The Characterization and Development of Bioactive Hydroxyapatite Coatings," J.L. Ong, M. Appleford, S. Oh, Y. Yang, W.-H. Chen, J.D. Bumgardner, and W.O. Haggard, July, pp. 67–69.
YANG, Z. "Fuel Cells: Status and Challenges in Materials and Technologies," Z. Yang, August, p. 36.
YOON, K.E. "The Use of 3-D Atom-Probe Tomography to Study Nickel-Based Superalloys," D.N. Seidman, C.K. Sudbrack, and K.E. Yoon, December, pp. 34–39.
YUAN, Q. "Transient Fluid-Flow Phenomena in the Continuous-Steel-Slab-Casting Mold and Defect Formation," B.G. Thomas, Q. Yuan, B. Zhao, and S.P. Vanka, December, (*JOM-e*) *www.tms.org/pubs/journals/JOM/0612/ThomasII/ThomasII-0612.html*.
YUE, S. "Materials Characterization Using High-Resolution Scanning-Electron Microscopy and X-Ray Microanalysis," R. Gauvin, K. Robertson, P. Horny, A.M. Elwazri, and S. Yue, March, pp. 20–26.

Z

ZAVALIANGOS, A. "The Modeling of Electric-Current-Assisted Sintering to Produce Bulk Nanocrystalline Tungsten," B. McWilliams, A. Zavaliangos, K.C. Cho, and R.J. Dowding, April, pp. 67–71.
ZEHETBAUER, M.J. "Producing Bulk Ultrafine-Grained Materials by Severe Plastic Deformation," R.Z. Valiev, Y. Estrin, Z. Horita, T.G. Langdon, M.J. Zehetbauer, and Y.T. Zhu, April, pp. 33–39.
ZENG, K. "The Root Cause of Black Pad Failure of Solder Joints with Electroless Ni/Immersion Gold Plating," K. Zeng, R. Stierman, D. Abbott, and M. Murtuza, June, pp. 75–79.
ZHANG, C. "The Material Optimization and Reliability Characterization of an Indium-Solder Thermal Interface Material for CPU Packaging," C. Deppisch, T. Fitzgerald, A. Raman, F. Hua, C. Zhang, P. Liu, and M. Miller, June, pp. 67–74.
ZHANG, Y. "Deformation and Phase Transformations during the Cyclic Oxidation of Ni-Al and Ni-Pt-Al," B.A. Pint, S.A. Speakman, C.J. Rawn, and Y. Zhang, January, pp. 47–52.
ZHAO, B. "Transient Fluid-Flow Phenomena in the Continuous-Steel-Slab-Casting Mold and Defect Formation," B.G. Thomas, Q. Yuan, B. Zhao, and S.P. Vanka, December (*JOM-e*), *www.tms.org/pubs/journals/JOM/0612/ThomasII/ThomasII-0612.html*.
ZHU, Y.T. "Nanostructured Materials: From Laboratory to Commercialization," Y.T. Zhu, April, p. 27.
ZHU, Y.T. "Producing Bulk Ultrafine-Grained Materials by Severe Plastic Deformation," R.Z. Valiev, Y. Estrin, Z. Horita, T.G. Langdon, M.J. Zehetbauer, and Y.T. Zhu, April, pp. 33–39.
ZIEBOLD, S. "Increasing the Capacity of High-Efficiency Diffusion Fiber Beds in Smelter Gas Plants," S. Ziebold and D.E. Azwell, October, pp. 59–62.